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Overcoming Challenges in COVID-19 Vaccination among Ethnic Minority Groups in Bangladesh: A Qualitative Exploration

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Abstract

This study aimed to explore the barriers affecting COVID-19 vaccine uptake among ethnic minorities and to propose strategies to strengthen government initiatives for inclusive vaccination. Grounded in social constructivism, this qualitative study was conducted in the greater Sylhet Division, where many ethnic communities live. Using purposive sampling, semi-structured interviews were conducted with 49 participants, including ethnic men and women, community leaders, and healthcare providers. Two focus group discussions (FGDs) were also conducted to ensure data validation, and the results were analyzed using thematic analysis, which revealed several factors, such as free vaccinations, media, close community-knit healthcare centers, informal communication that positively influenced vaccine uptake, such as awareness campaigns, informal communication, media involvement, and free vaccine availability. However, socio-economic and technological barriers pose significant challenges, including misconceptions about vaccines, limited access to technology, long distances to vaccination centers, inconvenient service hours, and reliance on traditional medicine. To promote inclusive vaccination, the study recommends establishing localized vaccine camps, improving technological infrastructure such as the Internet and network access, enhancing communication strategies, providing special services for women, the elderly and disabled individuals, and ensuring a reliable vaccine supply. Future researchers could apply longitudinal studies, including a lager study area and broader range of participants to address the missing perspectives in the current study.

Keywords

Ethnic Minority Healthcare, COVID-19 Vaccine Uptake, Inclusive Vaccination Strategies, Bangladesh

1. Introduction

The COVID-19 pandemic, caused by SARS-CoV-2, has had a profound impact on global health, economic stability, and social structures [1]. This has led to a multifaceted global crisis that affects health, economic activities, and international relations [2] [3]. The COVID-19 pandemic has had an extreme and wide-ranging impact on Bangladesh, from economic and healthcare challenges to changes in social behavior and mental health [4]. The country has faced difficulties in various sectors, including journalism, healthcare, the economy, and social life, with the pandemic exacerbating existing vulnerabilities and creating new ones [5] [6]. The pandemic's broader effects on the country include challenges in managing the spread of the virus, economic disruptions, and strain on healthcare systems. Mental health has also deteriorated, with high prevalence rates of loneliness, depression, anxiety, and sleep disturbances among the population [7]. Lockdown measures have influenced attitudes and lifestyles with varying responses based on demographic factors [8]. At the societal level, the pandemic has led to the postponement of childbearing plans for many, highlighting its influence on personal and family decisions [6]. Ethnic minority communities, including those of Bangladeshi origin, face specific barriers to vaccine uptake owing to a confluence of factors. These include isolation from the mainstream, concerns about the speed of vaccine roll-out and potential health impacts, mistrust of official information, exposure to misinformation, and negative messaging outweighing positive information [9]. Additionally, there is a lack of culturally appropriate interventions and a need for an increased understanding of how to address vaccine hesitancy within these communities. Interestingly, while interventions to increase vaccine uptake have been identified, such as education, persuasion, and enablement, there is no strong evidence to recommend specific interventions, highlighting the complexity of the issue [10]. Moreover, barriers, such as vaccine-induced HIV infection fears, side effects, and mistrust, which were identified in the context of HIV vaccine trials, may also resonate with COVID-19 vaccine hesitancy. Furthermore, the disproportionate burden of COVID-19 on ethnic minority communities and the lack of targeted interventions contribute to the low vaccine uptake [11].

The government initiatives and policies in Bangladesh aimed at COVID-19 vaccination are characterized by efforts to manage and overcome challenges associated with the vaccination process. According to [12], Bangladesh, with its large population, has faced significant risks during the pandemic. The study reviews the management of the vaccination campaign and process, highlighting both the commendable initiatives and the shortcomings. Interestingly, [13] provides a different perspective by analyzing the sentiments of Bangladeshi netizens on social media regarding the vaccination program. The sentiment analysis reveals that a majority of the social media reactions are positive, indicating an overall favorable public perception of the vaccination efforts. Bangladesh has approximately two million people from 27 officially recognized ethnic minority groups, constituting around 1.25% of the population [14]. These ethnic minority groups have historically been

marginalized socially and politically, and often reside in isolated and economically disadvantaged regions. They have also received minimal attention from local and national politicians. Although government health services are generally lacking in Bangladesh, ethnic minorities face two significant challenges in accessing healthcare services: the remote location of many communities and discrimination. Hence, the study aimed to shed light on exploring the challenges of up taking COVID-19 vaccine among ethnic minority communities. This study also attempted to develop an approach for strengthening government initiatives to ensure the inclusive vaccine uptake among ethnic minority communities of Bangladesh.

2. Relevant Literature Review

The implementation of a vaccination program, which varies among population groups, is crucial for successful execution. Implementing vaccines may exclude people from all socioeconomic groups if the interventions are not targeted in accordance with the needs, concerns, and barriers to vaccine uptake that are understood [15]. Minority ethnic groups are disproportionately affected by the COVID-19 pandemic, experiencing higher morbidity and mortality due to their low vaccination uptake [16]. Compared to 79% of white respondents, only 57% of respondents from minority ethnic groups in the UK said that they were inclined to take the COVID-19 vaccine [17]. Additionally, in San Francisco, those who were identified as Black, Latinx, Asian, Multiracial, and other races (ethnic minorities) were markedly less likely than those who were identified as White to have a high readiness to receive vaccinations. A quarter of Black respondents said that they would not be vaccinated because they did not trust the firms that provide COVID-19 vaccines and did not think a vaccine would work to prevent infection [18]. Access to and acceptance of vaccinations by racial and ethnic minorities are hampered by a variety of social, geographic, political, economic, and environmental issues [19]. These include disparities in education, income, wealth, barriers to employment and working conditions, access to healthcare, accessibility to transportation, unfavorable neighborhood circumstances, and most importantly, a lack of confidence in medical services [20]. As a result, vaccination rates among ethnic minorities were reduced. Lack of accessibility, inadequate risk perception, and gaps in disease prevention and healthcare promotion are the main barriers to vaccination that ethnic minority communities encounter in the healthcare system [21]. Language difficulties have been noted as deterrents to vaccination in ethnic minority communities [22]. Despite the numerous deaths the virus has caused in these areas, these barriers make it difficult to learn about and obtain information on COVID-19 vaccines, and they may also result in a general lack of understanding of their significance [23]. The Bangladeshi government started administering COVID-19 vaccines on January 27, 2021, and expanded vaccination on February 7, 2021, in an effort to combat the pandemic [4]. Due to Bangladeshi people's hesitation to receive vaccinations, Bangladesh's average vaccination rate is among the lowest in South Asia [24]. Despite the great success of the global COVID-19

vaccine uptake, not all Bangladeshi populations have received the vaccine. The ethnic minority communities in Bangladesh are very conservative and isolated from mainstream communities, which leads them to keep away from important government information and other facilities [25]. The government of Bangladesh is trying to bring the entire country's population under vaccination through a decentralized healthcare system [26]. However, the current infrastructure and supplies may not be adequate to ensure a swift vaccination campaign. To ensure the COVID-19 vaccine's actual success, the government must demonstrate its ability to obtain vaccine supplies and plan and implement successful and inclusive vaccination campaigns [27]. Many researchers have conducted studies on the socio-economic conditions, gender discrimination, human rights, identity crises, and cultural diversity of ethnic minorities in Bangladesh; however, few researchers have focused on government initiatives for effective COVID-19 vaccine uptake. This informs the researcher's interest in filling the gap.

3. Research Methodology

This qualitative study employed the philosophy of social constructivism to explore the challenges of up taking COVID-19 vaccines among indigenous communities. The participants' experiences, attitudes, and interactions regarding vaccinations among Bangladeshi ethnic minority communities were investigated using a qualitative research approach in order to fulfill the study's objective. Constructivism, which seeks to understand the situation's specifics and the reality that underlies them, can help social scientists better understand the big picture and the current state of affairs [28]. A qualitative study aims to create an avenue for an in-depth understanding of societies through observation via learning from the community's experiences and knowledge [29] [30]. Unlike the quantitative method, the qualitative method emphasizes the participatory approach using dialogue and negotiation, which has emerged as a successful approach for effective community participation [31] [32]. Similarly, [29] [33] stated that the qualitative research approach focuses on a target population to investigate their experiences and behavior through non-numerical information rather than numerical data. Hence, subjective research seeks an in-depth comprehension of societies, learning through individuals' points of view, experiences, and narratives, and the consequences of exploration are likely to be unmistakable as opposed to prescient [34]. A qualitative study aims to create an avenue for an in-depth understanding of societies through observation by learning from the community's experiences and knowledge [29] [30]. Through qualitative research, the researcher can explore and document the participants' perceptions, attitudes, and interactions in real-life situations [35]. Moreover, qualitative research enables the researcher to conduct an in-depth study of a broader aspect of the issue that may be anomalous in other research methodologies [36]. Finally, the data obtained from the qualitative approach are rich and subjective, and are considered highly valid [33]. Researchers have conducted a field study on the Sylhet division. There should be a rationale for site

selection for any research using both qualitative and quantitative approaches. To conduct significant and useful research, the site selected should be the place where 1) entry is possible; 2) there is a high probability of the presence of a mix of people, processes, programs, interactions, structures, and interests; 3) the researcher can build a trust relationship with the respondents; and 4) data quality and credibility can be assured [37]. Hence, the Sylhet Division (Sylhet, Sunamganj, Moulvibazar and Habigonj Districts) was suitable for conducting this study. The divisional map is shown in **Figure 1**. The Sylhet division has a strong history, and heritage is a diversified culture with Manipuri, Khasia, Garo, Tripura, and Hajong, Munda, Santal, Telegu, Rabidas, and Kairi ethnic groups from neighboring states of India. Ethnic minorities constitute 1.5% of the overall population in the Sylhet division [38]. A large number of local government agencies are working in this region to develop this area. The purpose of selecting multiple cases is to demonstrate different perspectives and processes [39].

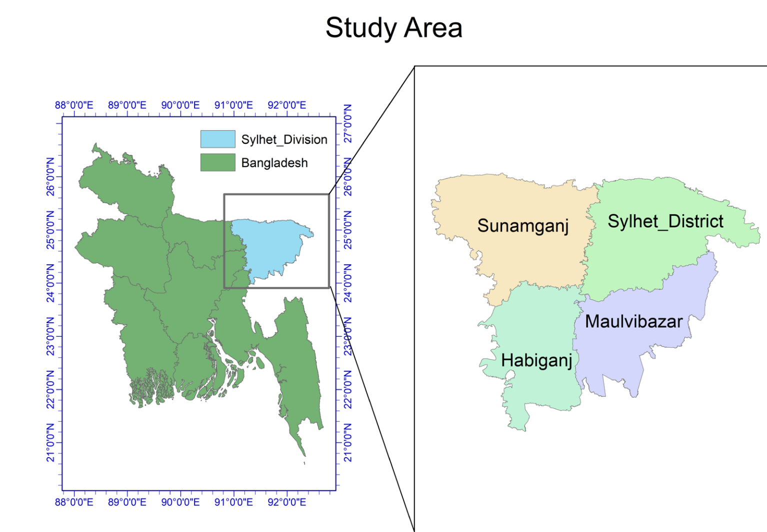


Figure 1. Study area.

For this study, 49 participants were selected, including manipuri women and men, local leaders in Manipuri communities, and local health care providers. The reason for this is that in order to respond to the research questions, the participants or respondents must possess the requisite knowledge and experience [40]. The sample size for qualitative research should be sufficient to reveal the most important perceptions, but an excessively large sample can lead to repetition and be unnecessary [41]. For the qualitative study, the sample size is expected to reach between 20 - 30 [39] or 30 - 50 [42]. Bernard and Bernard [43] recommend that 10 - 20 learned individuals are sufficient to discover and recognize the core categories in any well-defined social space or inquiry into lived experience. Creswell and Poth [39] suggest that the selection of 20 to 30 participants for a qualitative study, 4 to 5 cases for case study research, and 2 or 3 individuals for narrative research can bring meaningful findings. Furthermore, while the sample size in

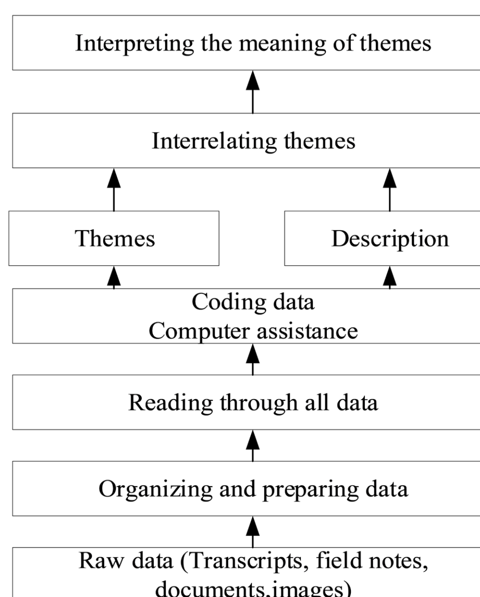
qualitative research is less important, the quality of information is the main consideration in an excellent study [44]. Hence, the sample size for this study was determined from a saturation point of view. Purposive (non-probability) sampling was chosen because probability sampling is not required for qualitative research [45]. Purposive sampling was applied to unique cases. Determining information-rich cases that are in line with research goals and can teach a lot is the aim of purposeful sampling [46]. Norris [47] mentions purposive sampling as one of the most effective methods for gathering accurate data. A field study was carried out by researchers in order to gather the essential firsthand data about the study's objectives. The investigators employed a methodological triangulation of the qualitative approach, incorporating interviews and FGDs, in order to arrive at a rational response to the research questions. The most popular method for conducting research is interviewing people [48]. As Abejirinde *et al.* [49] and Nilsen *et al.* [50] noted that people who participate in qualitative research should be chosen based on their familiarity with and understanding of the specific topic under investigation. [51] outlined three forms of interviews: structured, semi-structured, and unstructured. A structured interview is more closed, with little flexibility; a semi-structured interview presents a series of open-ended questions, and an unstructured interview offers a limit-free option to respond. The researchers used a semi-structured interview format as it is more flexible in exploring the topic more deeply, which diminishes the chance of bias [52]. Semi-structured interviews included key queries that helped outline or describe the area to be investigated. In addition, it permits the inquirer or respondents to seek afterthoughts or reactions in more detail. This interview design is employed the most when researching social aspects because it offers respondents some direction on what to discuss, which many find useful. This approach's flexibility, particularly when compared to organized interviews, also permits the disclosure or elaboration of material essential to participants but previously not considered significant by the research team [53]. A maximum of six participants participated in each of the two Focus Group Discussions (FGDs) held with community leaders. With so much flexibility and room for respondent reaction to other respondents' responses, (FGDs) make it easier to frame a dynamic and synergistic approach. The number of participants and the nature of the inquiries are listed in **Table 1**.

Table 1. Participants of the study.

Serial	Nature of inquiry	Types of participants	Number
1.	Interviews Face to face	Ethnic women	16
2.	Interviews Face to face	Ethnic men	16
3.	Two FGDs (6 * 2)	Ethnic community leaders	12
4.	Interview (KI)	Local health care providers	5
		Total	49

Data Analysis

Data analysis is a technique of inspecting, absorbing, and molding data to explore beneficial information, inform conclusions, and aid decision-making. Data analysis has a number of aspects, approaches, and various methods with different names and is used in diverse domains [54]. In qualitative research, data analysis is carried out at every stage of the accumulation process. [55] [56] noted that data analysis follows recursive and dynamic data gathering. There are numerous techniques for analyzing qualitative information [40]; however, as the prime operator, the researcher must choose the most consistent and methodologically sound method [36]. The researchers chose to use a thematic analysis approach for this study because, in qualitative research, this method is more flexible and is often used when there is a broad range of study objectives and topics. It is recognized that quantitative analysis may not have all of these advantages [57]. The deductive method used in quantitative analysis is hypothesis-centered, whereas the majority of qualitative data analysis is inductive, allowing meaning (themes) to emerge from the data [57]. Hence, the data analysis process is suggested to apply both the inductive and deductive approach because the inductive approach is typically used for small samples and the findings cannot be generalized [58]. Moreover, inductive analysis is frequently data-driven, focusing on the identification of themes and patterns from gathered data [59]. According to Marshall & Rossman [60] deductive analysis is a concept- or theory-driven method that connects various themes in the literature and interprets evidence. The investigators employed the procedures prescribed by [51] to examine the data from this qualitative investigation. In the analysis of qualitative data, Creswell delineated six stages (**Figure 2**), researchers have utilized two-cycle coding methods: structural and provisional



Source: Cresswell and Cresswell, 2017.

Figure 2. Qualitative data analysis technique.

coding. Structural coding, also called open coding, is derived from the data, while provisional or selective coding is theory-driven [61]. Researchers utilized first-cycle coding, also known as open coding, to classify these diverse concepts, facilitating their subsequent research endeavors. In order to select and include organized data categories that led to theories, the second (selective) cycle of coding was employed. The case's narrative was then developed using a technique known as pattern coding, which was based on the perspectives and involved a higher level of abstraction [62].

4. Findings and Discussions

To interpret the primary data, we focused on theoretical perspectives from the literature concerning government initiatives for managing vaccine uptake among indigenous communities in Bangladesh. Government initiatives for the effective vaccine uptake of indigenous communities are generally impeded by the paternalistic social structure, sociocultural norms and practices, workload, lack of information, and isolation. The main barriers to vaccine uptake are summarized in Table 2. The themes that emerged from the study covering interpretative alignments based on the participants' reflective experiences regarding the challenges and enhancement of vaccine uptake among indigenous communities are discussed in the following section.

Table 2. Selective coding, open coding and emerging themes.

Selective coding	Open coding	Emerging themes
Current-encouraging factors of vaccine uptake.	Awareness building Close community-knit healthcare center Media Free vaccination Informal communication Obliligatory factors	Some easily accessible factors positively influence indigenous communities for up taking vaccines
Challenges of vaccination	Misconception Lack of technology Long distance Inconvenient timing Traditional treatment & conservativeness	Socio-economic and technological backwardness has impeded up taking vaccines among ethnic minorities
Enhancement of government initiatives	Camp formation Network or Wi-Fi development Inclusive service for disabled Information and communication development Available supply of vaccines	Strategies bridging the gap for strengthening effective vaccination process among indigenous communities

In the following section, researchers discuss emerging themes regarding existing facilities, challenges, and opportunities for vaccine uptake among ethnic minority communities in Bangladesh.

4.1. Some Easily Accessible and Obligatory Factors Positively Influence Indigenous Communities for Up-Taking Vaccines

Most of the indigenous communities of Bangladesh live in far away from the mainstream and like to stay very close to the nature. They also afford their livelihood on the nature-based production. They have their own distinct culture and traditions, and they dislike the interruptions of outsiders. However, during the COVID-19 pandemic, some government and Non-government organizations (NGOs) intervened there for raising awareness among them. Local government authorities arranged miking to use masks, hand sanitizer, and quarantine. The headman[1] of the respective community regularly went door to door of the clan to provide information regarding the functions and motivated to uptake vaccines timely. NGOs workers visited every house and distributed mask, sanitizer, and tissue paper among ethnic minorities. They also advised people not to panic and motivated everyone about vaccination [63]. All Television channels concurrently broadcasted awareness raising programs and provided government issued guidelines owing to reduce the severity of COVID-19 disaster [64]. In most research areas, the mobile network connection was very poor, but they enjoyed the Wi-Fi connection to get update information of COVID-19 by using YouTube, Facebook, and other social media. One of the participants noted:

"*No mobile sim network is available in our area. So, we must stay informed about our responsibility during Covid-19 through YouTube, Television, and other social media using Wi-Fi.*"

The main means of livelihood of indigenous communities in Bangladesh is collecting tealeaves from tea gardens. Considering this, in most tea gardens, there are established community clinics to provide free healthcare services for the family members of tea workers. Two computers were set up at the tea garden health center so that tea workers could easily register for vaccination during the COVID-19 period. Upazila health centers (Upazila health complex and Upazila health and family welfare center) handed over some vaccines to the healthcare providers of the respective tea gardens so that the workers could get free vaccines. Informal communication also strengthened the trend in awareness and vaccination during the pandemic. Some educational institutions have taken the initiative to vaccinate students at schools. These students disseminated the feelings, necessity, and normality of up taking vaccines with their parents, peers, relatives, and neighbors, which they had learned from their teachers [65]. Some mandatory factors have bound indigenous people to get COVID-19 vaccines. To make this vaccination program effective, the government of Bangladesh aligned with the emergency global policy and took some strategies, such as no one would get passport, visa,

[1]Heads of the clan.

ride on public transport, travel overseas, access to workplaces (shopping malls, garments-industries), and other public services without vaccination [66]. One participant said,

"*I am afraid of injection needles. That's why I didn't take the vaccine initially even though the COVID-19 vaccination was started. However, later it was declared compulsory to take COVID-19 vaccines from my garments factory (workplace). To save my job I was forced to take first dose of COVID-19 vaccine.*"

4.2. Socio-Economic and Technological Backwardness Has Impeded Up-Taking Vaccines among Ethnic Minorities

Indigenous communities strictly bear and nurture their cultures, ideologies, and religions. They believe that COVID-19 is a punishment from nature due to the unethical activities of human beings. When the level of sin rises in the world, this curse descends. They also believe that the COVID-19 attacked the rich who work and corrupt under air conditioners. However, those who engaged in sweaty physical hard work did not affect them. They had misconceptions about believing in and taking vaccines [67]. They think that if anyone takes the COVID-19 vaccine, he/she will deviate from the path of religion. Many of them were reluctant to uptake the COVID-19 vaccine due to the fear of damaging internal organs, such as the liver, kidney, and lung. One of the participants express his bitter experience as:

"*One of my friends, a quite healthy person had tea with me in the morning. At noon, he took COVID-19 vaccine and from that night, he felt severe abdominal pain. He was brought to a renowned Indian hospital for better treatment by air, but few days later he expired*"

As indigenous communities live near mountains or jungles far from the mainland, mobile networks are rare [68]. However, a mobile number is required to complete the registration for vaccination, where the date and place of vaccination are provided through a Short Message Service (SMS). Owing to the absence of mobile networks, SMS does not reach the majority, and they remain ignorant of the vaccination process. Even if anyone goes under network coverage, due to a lack of education, they cannot read the messages and understand their meaning. Because they live in remote areas, technological service facilities (computer typing, e-services, printing, etc.) are not available near them. As their location is far from the city or suburbs, it takes USD 0.45 - 0.91 transportation costs to go to the vaccination or registration center [69]. Even though ethnic minorities do not want to go outside the community, the long distance and fare make them reluctant to take up vaccines. Although two computers were set up for vaccine registration in the tea gardens in some areas, they were mostly dysfunctional due to lack of good technicians. Moreover, it is very difficult for the elderly, women, and children to go to registration or vaccination centers, even if able-bodied men or younger men can go there.

One of the participants stated:

"*We heard about the registration of COVID-19 vaccine from our neighbours.*

However, the Upazila Health Complex (UHC) vaccine center was 20 *km away from our locality. The transportation cost was around* 100 *tk and the computer operator took* 50 *tk from me for completing the registration process. So, many of our community members avoid up taking COVID*-19 *vaccine.*"

Naturally, indigenous communities are very active and have worked hard for a long time. They usually start the work by setting everyday goals and become determined to achieve them [70]. However, the vaccination duration ranged from 9 am to 4 pm. Most are poor and live from hand to mouth. If they want to take the vaccine, they must leave work. Furthermore, many times after a long waiting in the line, the authorities declared that the vaccination process was closed for that day owing to the shortage of vaccines. At times, some officials of the health centers showed nepotism by violating the rules, such as breaking the line series and preserving vaccines for their relatives. Not receiving the same company's vaccine consistently creates fear among people. These challenges demotivated people from taking vaccines. Ethnic minorities still rely on natural or herbal remedies for the treatment of various ailments. When they feel unwell, the local Kabiraj[2] becomes their first choice. To survive from COVID-19, most of them depend on traditional treatments [71]. Among the various traditional practices, a notable practice was to consume a variety of homemade *Taru*[3]. They believed that taking it would get rid of the COVID-19. Moreover, they considered hard work, physical exercise, and a natural herbal diet as antidotes for the prevention of any disease. Most of the ethnic minorities are very much conservative and ethnic women are guided by their family heads. Ethnic women express reluctance to approach male providers at healthcare centers and receive vaccines from them. One of the healthcare providers noted:

"*Two out of three service providers in our community clinic are men, so indigenous women do not want to receive injections in our hands. They do not even want to talk to us about any disease for treatment.*"

4.3. Strategies Bridging the Gap for Strengthening Effective Vaccination Process among Indigenous Communities

Ethnic minorities have lagged behind modern treatment because of several complexities. These communities prefer to live in close proximity to their own cultures and traditions, especially in hilly and forested areas. They were reluctant to interfere with their matters. However, many ethnic minorities rarely communicate with mainstream culture. Their long distance and poor transportation also cause them to abstain from going outside. Having a good communication system is essential for inclusion in inclusive national health policies. The available mobile network is the prime requirement and demand for SMS for vaccination (registration and vaccination dates). Although they get registration for vaccination in computer service centers, getting the update about receiving vaccines a mobile number is obligatory. Most community members have the opportunity to enjoy

[2]Who practices ayurved.

[3]One kind of homemade hot fluid made with water and leaves of plants.

Wi-Fi services to watch videos, YouTube, and news. However, they missed the date of vaccination owing to unavailable mobile networks. Some ethnic communities have access to Indian mobile networks owing to their proximity to the Indian border regions, but not the Bangladeshi network. Community-based organizations, such as families, social clubs, religious organizations, women, youth, and microcredit groups, can play a vital role in extending vaccination programs among ethnic minorities by raising awareness about the necessity of taking vaccines, the risks of non-takers, and its impacts on the future generation. The elected local and government representatives should create a collaborative network with these organizations and gear up the vaccination process by arranging clan-based camps, visiting each home to make them better understand, and miking in the respective local areas to inform them about the time and date of vaccination. There are many pregnant women, disabled, children, and elderly people, who have no capacity to visit vaccination centers far away from their homes. Hence, door-to-door services can ensure the establishment of inclusive vaccination (Figure 3). Local government bodies, along with other social groups, should make a mock drill for the eradication of misconceptions and superstitions remaining among ethnic minority communities, which would strengthen the vaccination process. Community-based organizations can create three types of social capital: a bonding network among the same communities, bridging the network within the

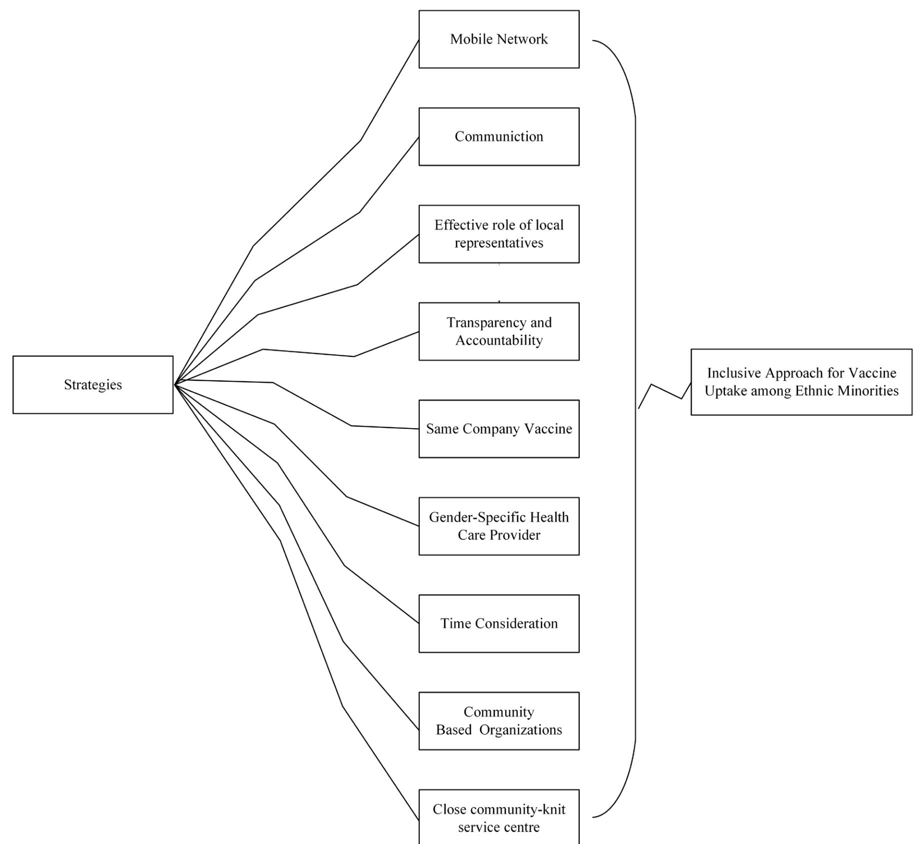


Figure 3. Inclusive approach for vaccine uptake among ethnic minorities.

communities, and linking networks throughout the globe. This initiative would help build trust, capacity, and courage to face any type of challenge of ethnic groups. Some educated ethnic people have claimed the unavailability of vaccines from the same company. Every individual was required to receive three dosages of vaccines along with a buster dosage. Some of them took AstraZeneca as the first dose, but in the second time, they did not get the same company vaccine due to its unavailability. Many times, they have become confused and rejected vaccines. Hence, the government and private organizations should make efforts to obtain the same company vaccines for ethnic people. Most ethnic minorities are very conservative and dislike outsiders' interference. Women in ethnic communities are generally obeyed by family members. Although they are involved in agriculture, household chores, collecting fuel wood, and hand looming and selling them in the near marketplace, the family norms restricted them from visiting male doctors in nearby clinics or healthcare centers. They dislike touching their bodies by male healthcare providers at the time of vaccination. Considering this sensitive issue, in every vaccination camp, both male and female healthcare providers should be kept, especially in place of ethnic minority communities.

Moreover, establishment of regulation regarding vaccination is essential to ensure accountability and transparency.

5. Conclusion

Ethnic minorities have faced many challenges in terms of their survival, but ethnic groups in Bangladesh have been facing sociocultural, economic, political, and religious challenges over time owing to their isolation from mainstream society. They are hardworking and have a distinct culture. They preferred to live in natural settings without interference from outsiders. Most of them have little knowledge about basic health issues and rely on traditional herbal treatment. Hence, this study aims to explore the challenges faced by ethnic minorities while taking COVID-19 vaccines. A qualitative research approach was used in this study. Data were collected through semi-structured interviews, scheduled by applying methodological triangulation (Interviews and FGDs). Researchers have used a thematic analysis method to organize and analyze data by applying two coding cycles: structural coding and provisional coding. Ethnic minority groups in Bangladesh are unaware of their health. During the COVID-19 pandemic, the government took different initiatives to cover people from all strata, irrespective of gender, religion, culture, caste, and distance, under the vaccination program with the aim of developing an inclusive national health policy. Consecutively, some initiatives of government and non-government organizations, such as visiting door-to-door to raise awareness and provide information, distributing masks, sanitizers, observing quarantine, and encouraging them not to panic, motivated ethnic groups to take up vaccines. Furthermore, TV channels, local headmen, educational institutions, and free vaccinations also worked as motivating factors for up taking COVID-19 vaccines. The government also took some tricky strategies to cover all the people

of Bangladesh, such as getting passport or visa services from the concerned authority, flying on board, and working in industries even using public transports required or mandatory to show vaccine certificates. The ethnic groups who worked in tea or rubber gardens and local healthcare centers (nearby gardens) arranged vaccinations for them. However, most ethnic minority communities are strictly bounded by their own social systems and cultures, which, in some cases, create obstacles to the popular vaccination process. They feel unwilling to get registration and take up vaccines owing to their long distance from the city or healthcare centers. In addition, registration fees, technological inaccessibility, and unavailable mobile networks for receiving vaccines related to SMS also demotivated them from receiving vaccines. The ethnic minority groups had some misconceptions regarding COVID-19 vaccines, such as the fact that only corrupted people will be affected by the COVID-19, as it was a natural punishment. They were unwilling to take vaccines, believing that their traditional herbal medicine is far better than vaccines for quick recovery from any type of disease, as they learned from their ancestors. Vaccination time is another problem. During working time (9 AM to 5 PM), they were reluctant to visit health centers for up taking COVID-19 vaccines. In addition, ethnic minority women were obeyed by their family heads, who rarely permitted them to visit community clinics or healthcare centers with male care providers. Considering these issues, enhancing collaboration with community-based organizations, strengthening communication systems, maintaining the proper flow of information to ensure transparency and accountability, arranging gender-specific healthcare providers, and establishing close community-knit service centers are indispensable for developing inclusive vaccination approaches. Since this study explored the challenges of vaccination uptake among ethnic minority communities, the findings of this study would facilitate the initiatives taken by policymakers, NGOs, communities, and other development organizations to enhance the strategies for developing inclusive vaccination approaches for ethnic minority communities. Future researchers could conduct a quantitative approach by applying longitudinal studies including a broader range of respondents to address the missing perspectives in the current study.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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